

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION 5 EMERGENCY RESPONSE BRANCH 9311 GROH ROAD, ROOM 216** GROSSE ILE. MI 48138-1697

OCT 1 9 1998

REPLY TO ATTENTION OF:

MEMORANDUM

SUBJECT:

ACTION MEMORANDUM - Request for a Time-Critical Removal Action at the

Michigan Chrome and Chemical Site, Detroit, Wayne County, Michigan (Site ID

#B550)

FROM:

P.C. Lall, On-Scene Coordinator

K Call Emergency Response Branch - Section 1

TO:

William E. Muno, Director

Superfund Division

THRU:

Richard C. Kark Thief Emergency Response Branch

I. **PURPOSE**

The purpose of this memorandum is to request and document your approval to expend up to \$321,200 in order to abate an imminent and substantial threat to public health and the environment posed by the presence of contaminated soils, piles of metallic plating wastes, plating sludges and laboratory chemicals at the inactive and badly vandalized Michigan Chrome and Chemical (MCC) Company Site in Detroit, Wayne County, Michigan. Drums containing corrosive materials are also present in the open yard at the facility.

The actions proposed herein will mitigate site conditions by investigating the extent of surface contamination at the site and by implementing a removal action. Negotiations with the Responsible Party have been ongoing but the Responsible Party has declined to conduct a removal claiming financial inability to perform the removal action despite earlier assurances to conduct the removal. The fact that releases of hazardous substances have already occurred and are likely to continue until removal activities have been completed requires that on-site activities be considered time critical.

The MCC site is not on the National Priorities List (NPL).



II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #MID 005 378 161

A. Physical Location and Description

The MCC Site is located at 8615-35 Grinnell Avenue, Detroit, Wayne County, Michigan 48213 (Latitude 42°23'50"N and Longitude 83°00'5"W). The site is approximately 10 acres and consists of two separate properties located in a mixed residential/industrial area. The properties are bordered to the south by Grinnell Street, to the east by industrial operations, to the north by the Detroit Terminal Railroad tracks, and to the west by Erwin Street. The closest residences are south of Grinnell Street, approximately 50 yards from the site. Approximately 16,570 persons live within a 1-mile radius of the site, 14 percent of which are Black and 26 percent are Hispanics. Median household income is approximately \$13,100. Houses in the area are 45.8 percent owner occupied.

The area surrounding the site meets the Category One Environmental Justice criteria as employed by the United States Environmental Protection Agency's (U.S. EPA) Superfund Program.

B. Site Background

The site owner-operator is Mr. Robert Huber. MCC currently is not an operating facility. During the operating years, the company was an industrial electroplating and coating facility, and the process produced an array of hazardous waste streams that included waste cyanide sludge, metal hydroxide sludge, and various organic solvents.

The site was referred to the U.S. EPA, Emergency Response Section 1, by the City of Detroit, Department of Environmental Affairs, on January 6, 1998. On February 5, 1998, the On-Scene Coordinator (OSC), along with members of the START team, conducted a reconnaissance walk through on site. Access was provided by the property owner, Mr. Huber, who, along with his attorney and consultants, also accompanied the U.S. EPA group for a site walk through.

Piles of metallic plating solids were observed on the floors in various locations in the building. The concrete floor in the cyanide treatment area was severely etched by corrosive chemicals. Long trenches connecting various process areas were full of sludge and sediment. Plating wastewater pretreatment tanks were full of liquid. Containers of chemicals and paints of various sizes were scattered around throughout the buildings and the laboratories. Many containers had labels indicating corrosive materials, flammables, and mercury as the contents. Outside the building, in an uncovered fenced area, were hundreds of 55-gallon drums, vats, and tanks containing various hazardous and nonhazardous materials.

Two solid samples from floors and a liquid sample from the wastewater tanks were taken. These samples were split with Environmental Consulting and Technology, Inc., consultant to MCC. Analytical data revealed high levels of heavy metals and cyanide in the solid samples. Toxicity Characteristic Leachate Procedure (TCLP) analysis indicated the leachate cadmium concentration is three times the Resource Conservation and Recovery Act (RCRA) levels allowed in the soils. The cyanide concentration is almost twice the level allowed based upon the direct contact exposure scenario.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the MCC Site present an imminent and substantial threat to public health, welfare, and the environment and meet the criteria for a removal action provided for in the National Contingency Plan (NCP), Section 300.415, paragraph (b)(2), specifically:

a) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Numerous containers, potentially containing hazardous materials and hazardous wastes, are present on site. Site soils have high levels of heavy metals and cyanides. The site is easily accessible and plenty of evidence of trespassing activity was evident. Dead rats were observed in the open trenches.

b) Hazardous substances, pollutants, or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

The outdoor storage area contained numerous containers of all sizes and types (vats, drums, tanks, small containers). Most of the containers were empty and unlabeled. A few containers held varying amounts of liquids. Drum labels observed included hydrogen peroxide 35 percent, irilac 1012 (a protective coating for metals), hydrocyanic acid salt and caustic soda. This area also contained bags of powder and debris. Some of these drums and vats are open and exposed, subject to leakage as well as subject to dermal contact when accessed by humans or animals. Unlabeled containers with incompatible materials may be stored near each other and may react violently if mixed inadvertently. Continued vandalism and uncontrolled destructive activity at the site could result in the release of such contaminants to the soil (surface and subsurface) and the groundwater at the site.

c) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Analytical results indicated that surface soils contained elevated levels of heavy metals (copper, chromium, cadmium, and zinc up to 900 mg/kg) and cyanide (14,000 mg/kg). TCLP analysis indicated the leachate cadmium concentration is three times the RCRA levels allowed in the

soils. The cyanide concentration is almost twice the level allowed based upon the direct contact exposure scenario. There were only two samples taken; however, a complete extent-of-contamination study of the surface soils is necessary to identify all the contaminated areas. Surface trenches are full of sludge potentially from plating processes. This sludge needs to be analyzed and removed. Tracking of contaminated soils, sludges, as well as release of contaminants from soils to groundwater, could potentially have occurred and would continue to occur unless the surface contamination is addressed.

d) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

There are leaks in sections of the roof so rainwater can enter the contaminated areas causing migration of the contaminants. The drums and other containers stored outside the buildings are exposed to the elements and are subject to deterioration.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the suspected hazardous substances on site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes to conduct the following actions to mitigate threats posed by the presence of hazardous substances at the MCC site:

- 1) Develop and implement a site health and safety plan and an emergency contingency plan;
- 2) Implement appropriate site security measures;
- 3) Conduct comprehensive site investigation activities, including site sampling and analysis necessary to fully characterize the nature and extent of contamination;
- 4) Identify, package, and dispose of all hazardous materials and wastes, including contaminated soils and lab containers from the entire site in accordance with Federal, State, and local regulations; and
- 5) Conduct post cleanup sampling and analysis to document completeness of the removal action.

All hazardous substances, pollutants, or contaminants removed off site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance with the U.S. EPA Off-Site Rule, 40 CFR § 300.440, 58 Federal Register 49215 (September 22, 1993).

The OSC has initiated consideration of post-removal site control consistent with the provisions of Section 300.415 (l) of the NCP. Elimination of all surface threats is, however, expected to minimize the need for post removal site control.

The response actions described in this memorandum directly address the actual or threatened release at the site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed. It is anticipated that time-critical removal activities will take approximately 40 on-site working days to complete.

The detailed cleanup contractor costs are presented in Attachment 1 and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:	
Cleanup Contractor Costs	\$180,000
Contingency (15%)	27,000
Subtotal	\$207,000
Total START	28,000
Extramural Subtotal	\$235,000
Extramural Contingency (20%)	\$ 47,000
TOTAL EXTRAMURAL COSTS	\$282,000
INTRAMURAL COSTS:	
U.S. EPA Direct Costs	
[(\$30 x (400 Regional Hours + 40 HQ Hours)]	\$ 13,200
U.S. EPA Indirect Costs	
(\$65 x 400 Regional Hours)	26,000
TOTAL INTRAMURAL COSTS	\$ 39,200
TOTAL REMOVAL PROJECT CEILING ESTIMATE	\$321,200

Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. A letter was sent to Mr. Jon Russell of the Michigan Department of Environmental Quality (MDEQ) on April 28, 1998, requesting that the MDEQ identify State ARARs. Any State ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action or delayed action ensues.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

X. RECOMMENDATION

This decision document represents the selected removal action for the MCC Site developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the site. Conditions at the site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling, if approved, will be \$321,200. Of this an estimated \$254,000 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE:	Director, Superfund Division	DATE: _	10/17/98
DISAPPROVE:	Director, Superfund Division	_ DATE:	

Enforcement Addendum

Attachment

- 1. Detailed Cleanup Contractor Cost Estimate
- 2. Administrative Record Index

cc: K. Mould, U.S. EPA, 5202-G

M. Chezik, U.S. Dept. of the Interior, w/o Enf. Addendum

A. Howard, MDEQ, w/o Enf. Addendum

R. Harding, MDEQ, w/o Enf. Addendum

F. Kelley, MI Dept. of Attorney General, w/o Enf. Addendum

BCC PAGE

REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT B ENFORCEMENT ADDENDUM MICHIGAN CHROME & CHEMICAL SITE DETROIT, MICHIGAN OCTOBER 1998 1 PAGE

REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR COST ESTIMATE MICHIGAN CHROME AND CHEMICAL SITE DETROIT MICHIGAN

OCTOBER 1998

The estimated cleanup contractor costs necessary to complete the removal action at the Michigan Chrome and Chemical Site are as follows:

Personnel	\$ 80,000
Equipment & Materials	30,000
Sampling & Analysis	15,000
Transportation & Disposal	55,000
Total	\$180,000

ATTACHMENT 2

ADMINISTRATIVE RECORD INDEX MICHIGAN CHROME AND CHEMICAL SITE DETROIT, WAYNE COUNTY, MICHIGAN

OCTOBER 1998

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1/15/98	R. Powers City of Detroit	J. El-Zein U.S. EPA	Fax Referral for Michigan Chrome Site	5
4/8/98	E&E START	G. Nabasny U.S. EPA	START Site Assessment Letter Report	16+ pictures
04/28/98	P.C. Lall	J. Russell	Letter Requesting State ARARs	1
00/00/98	P.C. Lall U.S. EPA	W. Muno U.S. EPA	This Action Memo (Pending)	

INDEPENDENT GOVERNMENT COST ESTIMATE MICHIGAN CHROME AND CHEMICAL SITE DETROIT, MICHIGAN

LABOR

RM, Foreman, Operator, 2 laborers + per diem = \$2,000/day x 40 days	\$80,000
EQUIPMENT AND MATERIALS	
Backhoe, 2 pickups, trailer, misc. = \$3,750/week x 8 weeks	\$30,000
SAMPLING	
Waste Profile and Analysis	\$15,000
TRANSPORTATION AND DISPOSAL	
50 yd cadmium waste at \$250/yd 100 yd cyanide waste at \$250/yd Acid liquids - 25 drums at \$200/drum Base liquids - 50 drums at \$175/drum Lab packs - 13 at \$290 each	\$12,500 \$25,000 \$5,000 \$8,750 \$3,770
Cleanup contractor TOTAL	\$180,020 or say \$180,000

POPULATION SUMMARY

LOCATION 42.300143, -83.110633	:	1.0 mi.	radius at
42.300143, -03.110033	_	01	
# BLOCK GROUPS INCLUDED NUMBER OF PERSONS NUMBER OF FAMILIES NUMBER OF HOUSEHOLDS	•	1.0500	
NUMBER OF PERSONS	:	102/2	
NUMBER OF FAMILIES	:	3970	
NUMBER OF HOUSEHOLDS	TMOONED:	2777	
MEDIAN (EST.) HOUSEHOLD	INCOME:	13118	
AGE U THRU 4	.	1506	
AGE 5 TAKU 9	•	2618	
AGE TO THRU IS	:	7149	
AGE 20 THRU 49	:	1043	
AGE 0 THRU 4 AGE 5 THRU 9 AGE 10 THRU 19 AGE 20 THRU 49 AGE 50 THRU 64 AGE 65 AND OVER WHITE	:	1842	
AGE 65 AND OVER	:	1606	
WHITE BLACK INDIAN ASIAN OTHER RACE HISPANIC OWNER OCCUPIED RENTER OCCUPIED PERCENT AGE 0 THRU 4 PERCENT AGE 5 THRU 9 PERCENT AGE 10 THRU 19	:	11141	
BLACK	:	2313	
INDIAN	:	205	
ASIAN	:	100	
OTHER RACE	:	2613	
HISPANIC	:	4375	
OWNER OCCUPIED	:	2610	
RENTER OCCUPIED	:	3091	
PERCENT AGE 0 THRU 4	;	11.2	
PERCENT AGE 5 THRU 9	i	9.1	
PERCENT AGE 20 THRU 49			
PERCENT AGE 50 THRU 64	:	11.1	
PERCENT AGE 65 AND OVER	:	9.7	
PERCENT WHITE	:	67.2	
PERCENT BLACK	:	14.0	
PERCENT INDIAN	:	1.2	
PERCENT ASIAN	:	C. <i>E</i>	
PERCENT HISPANIC	:	26.4	
PERCENT OTHER RACE	:	17.0	
PERCENT OWNER OCCUPIED	:	45.8	
PERCENT WHITE PERCENT BLACK PERCENT INDIAN PERCENT ASIAN PERCENT HISPANIC PERCENT OTHER RACE PERCENT OWNER OCCUPIED PERCENT RENTER OCCUPIED	:	54.27	



